IN THE CLAIMS

Please amend the claims as follows:

Claims 1-6 (Canceled).

Claim 7 (Currently Amended): A process for manufacturing a hollow mechanical part by diffusion bonding and superplastic forming, comprising:

a) providing at least two primary parts, said two primary parts having two faces and a periphery;

b) depositing a stop-off product in a predefined pattern on at least one face among each pair of those faces of the primary parts that are intended to face each other;

c) providing a ~~sealed~~ reservoir having only one [[an]] open end, the reservoir being produced so as to be non-deformable at the temperature and pressure at which the material of the primary parts undergoes diffusion bonding;

d) joining said primary parts together around their periphery with the exception of a place forming a passage, the primary parts forming a stack and defining, pairwise between them, a cavity that communicates with the passage;

e) placing the stack and the reservoir in a chamber under a partial vacuum of the chamber, thereby the internal volume of said reservoir is placed under a partial vacuum;

f) making a sealed join between the open end of said reservoir and the passage of the stack in the chamber under partial vacuum, so as to form an assembly allowing communication between the internal space of the reservoir and the cavity;

g) heating said chamber to the thermal degradation temperature of the binder, thereby allowing the gases resulting from the degradation of the binder to be sucked into the reservoir;

h) heating said chamber to the diffusion bonding temperature and pressurized to the diffusion bonding pressure, which causes said stack to undergo hot isostatic pressing diffusion bonding;

i) separating said reservoir from the bonded stack;

j) placing the bonded stack in a mould; and

k) bringing the mould to the superplastic forming temperature and an inert gas is injected under the superplastic forming pressure via the passage in the cavity, whereby the stack undergoes inflation and superplastic forming, allowing a blank of the mechanical part to be obtained.

Claim 8 (Previously Presented): The manufacturing process according to claim 7, wherein said joining the primary parts and the making the sealed join are carried out by electron beam welding.

Claim 9 (Currently Amended): The manufacturing process according to claim 7, wherein said partial vacuum is between 0.01 and 0.1 Pa~~, preferably between 0.03 and 0.07 Pa~~.

Claim 10 (Previously Presented): The manufacturing process according to claim 7, wherein said mechanical part is a hollow turbomachine blade, in particular a fan rotor blade, and wherein the stack comprises three primary parts that are made up of a suction side primary part, a central plate and a pressure side primary part.

Claim 11 (New): The manufacturing process according to claim 7, wherein the providing a reservoir includes providing a reservoir configured to withstand a temperature of at least 900 °C and a pressure of at least 4×10^6 Pa.

Claim 12 (New): The manufacturing process according to claim 7, wherein the providing a reservoir includes providing a reservoir made from a nickel-based or cobalt-based metal alloy.

Claim 13 (New): The manufacturing process according to claim 7, wherein the providing a reservoir includes providing a reservoir with a volume between 10 and 100 times a volume of the cavity in the stack.

Claim 14 (New): The manufacturing process according to claim 9, wherein the placing the stack and the reservoir in a chamber under a partial vacuum of the chamber includes placing the stack and the reservoir in a chamber under a partial vacuum of 0.03 to 0.07 Pa.

Claim 15 (New): The manufacturing process according to claim 14, wherein the placing the stack and the reservoir in a chamber under a partial vacuum of the chamber includes placing the stack and the reservoir in a chamber under a partial vacuum of 0.05 Pa.

Claim 16 (New): The manufacturing process according to claim 7, wherein the heating said chamber to the diffusion bonding temperature includes heating said chamber to the diffusion bonding temperature between 200 °C and 400 °C.

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 7-16 are pending in this application. Claims 1-6 are canceled without prejudice or disclaimer, Claims 7 and 9 are amended, and new Claims 11-16 are added by the present amendment. As amended Claims 7 and 9 and new Claims 11-16 are supported by the original disclosure,[1] no new matter is added.

In the outstanding Office Action, Claims 7-10 were rejected under 35 U.S.C. §103(a) as unpatentable over Wallis (U.S. Patent Application Publication No. 20010022023) in view of Turner (U.S. Patent No. 4,869,422); and Claims 7-10 were rejected under 35 U.S.C. §103(a) as unpatentable over Salt (U.S. Patent No. 5,711,068) in view of Turner.

Applicants and Applicants' representatives thank Examiners Tran and Aboagye for the courtesy of the interview granted to Applicants' representatives on January 24, 2007. During the interview, differences between the claims and Turner were discussed, along with a proposed amendment to Claim 7. Examiner Aboagye agreed that the proposed amendment as presented herewith appears to overcome the art of record.

With regard to the rejections of Claim 7 under 35 U.S.C. §103(a) as unpatentable over Wallis in view of Turner and Salt in view of Turner, those rejections are respectfully traversed.

Amended Claim 7 recites in part:

> c) ***providing a reservoir having only one open end***, the reservoir being produced so as to be non-deformable at the temperature and pressure at which the material of the primary parts undergoes diffusion bonding.

[1]See, e.g., the original claims, the specification at page 10, lines 21-25, page 11, lines 33-39, page 12, lines 15-27, and Figure 1.

The outstanding Office Action conceded that neither Wallis nor Salt teaches or suggests "providing a reservoir." The outstanding Official Action cited Turner as describing this element.[2] However, it is respectfully submitted that Turner does not teach or suggest "providing a reservoir" as recited in amended Claim 7.

Turner describes providing a gas bag 40 including a tube 46.[3] Thus, due to tube 46, gas bag 40 of Turner includes ***at least two open ends*** (the two open ends of tube 46). Thus, Turner does not teach or suggest "providing a reservoir having ***only one open end***" as recited in amended Claim 7. Consequently, amended Claim 7 (and Claims 8-16 dependent therefrom) is patentable over Wallis in view of Turner and Salt in view of Turner.

New Claims 11-16 are supported at least by the original claims and the specification at page 10, lines 21-25, page 11, lines 33-39, and page 12, lines 15-27. As new Claims 11-16 are dependent from Claim 7, new Claims 7-16 are patentable over the cited art for at least the reasons described above with respect to Claim 7.

Therefore, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 7-16 is earnestly solicited.

[2]See the outstanding Office Action at page 3, lines 19-20 and page 6, lines 4-5.
[3]See Turner, column 5, lines 33-48 and Figure 2.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representatives at the below listed telephone number.

Respectfully submitted,

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